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LAPTM4B Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20871a

Product Information

Application	WB, E
Primary Accession	Q86VI4
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42294
Calculated MW	35123

Additional Information

Gene ID	55353
Other Names	Lysosomal-associated transmembrane protein 4B, Lysosome-associated transmembrane protein 4-beta, LAPTM4B
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 195-209 amino acids from human.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LAPTM4B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LAPTM4B (HGNC:13646)
Function	Required for optimal lysosomal function (PubMed: 21224396). Blocks EGF-stimulated EGFR intraluminal sorting and degradation. Conversely by binding with the phosphatidylinositol 4,5-bisphosphate, regulates its PIP5K1C interaction, inhibits HGS ubiquitination and relieves LAPTM4B inhibition of EGFR degradation (PubMed:25588945). Recruits SLC3A2 and SLC7A5 (the Leu

	transporter) to the lysosome, promoting entry of leucine and other essential amino acid (EAA) into the lysosome, stimulating activation of proton-transporting vacuolar (V)-ATPase protein pump (V-ATPase) and hence mTORC1 activation (PubMed:25998567). Plays a role as negative regulator of TGFB1 production in regulatory T cells (PubMed:26126825). Binds ceramide and facilitates its exit from late endosome in order to control cell death pathways (PubMed:26280656).
Cellular Location	Endomembrane system; Multi-pass membrane protein. Late endosome membrane. Cell membrane. Cell projection. Lysosome membrane. Endosome membrane. Endosome, multivesicular body membrane. Endosome, multivesicular body lumen

References

Shao G.-Z.,et al.Oncogene 22:5060-5069(2003).
Hogue D.L.,et al.Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases.
Otsuki T.,et al.DNA Res. 12:117-126(2005).
Wiemann S.,et al.Genome Res. 11:422-435(2001).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.